



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,256	12/19/2001	Bret S. Weber	01-674	5721

24319 7590 06/02/2005

LSI LOGIC CORPORATION
1621 BARBER LANE
MS: D-106
MILPITAS, CA 95035

EXAMINER

NGUYEN, MIKE

ART UNIT	PAPER NUMBER
----------	--------------

2182

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/025,256

Applicant(s)

WEBER ET AL.

Examiner

Mike Nguyen

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03/10/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


FRITZ FLEMING
PRIMARY EXAMINER
GROUP 2100

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Notices & Remarks

1. Applicant's Amendment 03/10/2005 in response to Examiner's Office Action has been reviewed. The following rejections now apply.

2. Claims 1-26 are pending for the examination.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 6-9, 13-17, 21, 22, 25 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Samela (U.S. Pat. No. 6,217,228 B1).

As to claim 1, Samela teaches an apparatus for dual porting a serial disk drive (fig. 2), comprising:

a first idle regenerator connected to a first serial master device, the first serial idle regenerator being capable of receiving and transmitting signals to the first serial master device including an idle character stream (DB9 receptacle 48 of fig. 2 and col. 5 lines 27-36);

a second idle regenerator connected to a second serial master device, the second idle regenerator being capable of receiving and transmitting signals to the second serial master device including an idle character stream (DB9 receptacle of fig. 2 and col. 5 lines 27-36);

a third idle regenerator connected to the serial disk drive and the first and second idle regenerators, wherein the third idle regenerator is capable of communicating with the serial disk drive and the first and second idle regenerators (forty pin SCA 2 receptacle 3 of fig. 2 and col. 5 lines 47-54); and

synchronization logic capable of synchronizing data transfers between one of the first idle regenerator and the second regenerator, and the third idle regenerator, wherein the synchronization logic is connected to the first, the second and the third idle regenerators (col. 5 lines 39-41, 62-65).

As to claims 6, 13 and 21, Samela teaches the dual porting apparatus is suitable for utilization with fibre channel based communication (two fibre channel cable DB9 receptacles 48 of figs 2-4).

As to claims 7 and 14, Samela teaches the synchronization logic is capable of providing synchronization for idle character switch (col. 5 lines 62-65).

As to claims 8, 15, 22 and 25, Samela teaches the dual porting apparatus is embodied in an application specified integrated circuit (fibre channel adapter 40 of figs 2-7).

As to claims 9, 16 and 26, Samela teaches the dual porting apparatus is integrated with the serial disk drive (col. 5 lines 50-51).

Art Unit: 2182

As to claim 17, Samela teaches an apparatus for dual porting a serial disk drive (fig. 2), comprising:

a first means for regenerating an idle character stream, connected to a first serial master device, wherein the first idle regenerating means is capable of transmitting and receiving signals to and from the first serial master device (DB9 receptacle 48 of fig. 2 and col. 5 lines 27-36);

a second means for regenerating an idle character stream, connected to a second serial master device, wherein the second idle regenerating is capable of transmitting and receiving signals to and from the second serial master device (DB9 receptacle of fig. 2 and col. 5 lines 27-36);

a means for communicating serial disk drive data connected to the serial disk drive, the drive communication means being connected to the first and second idle data stream means, wherein the drive communication means is capable of generating an idle data stream (forty pin SCA 2 receptacle 3 of fig. 2 and col. 5 lines 47-54); and

a means for synchronizing communications between the first and the second idle regenerating means and the disk drive communication means (col. 5 lines 39-41, 62-65).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-5, 10-12, 18-20, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Samela in view of Ooi et al. (U.S. Pub. No. 2003/0005231 A1).

Art Unit: 2182

As to claims 2-5, 11, 12, 18-20 and 24, Samela fails to explicitly teach an auto detector is capable of controlling data transfer and switching between the first and second serial master device; and enables communication with a single serial master device at a time, and a serial advanced technology attachment disk device. Ooi; however, teaches, an auto detector is capable of controlling data transfer and switching between the first and second serial master device; and enables communication with a single serial master device at a time (fig. 3 and paragraphs [0039-0044]), and a serial advanced technology attachment disk device (SATA device 1 176 and SATA device 2 178 of fig. 3). It would have been obvious to a person of ordinary skill in the art to have the auto detector and the SATA in order to provide detecting; mapping and selecting one of ports interfacing to devices, and greater speed; simpler upgradeable storage devices and easier configuration.

As to claim 10, Samela teaches an apparatus for dual porting a serial disk drive (fig. 2), comprising:

a first idle regenerator connected to a first serial master device, the first serial idle regenerator being capable of receiving and transmitting signals to the first serial master device including an idle character stream (DB9 receptacle 48 of fig. 2 and col. 5 lines 27-36);

a second idle regenerator connected to a second serial master device, the second idle regenerator being capable of receiving and transmitting signals to the second serial master device including an idle character stream (DB9 receptacle of fig. 2 and col. 5 lines 27-36);

a third idle regenerator connected to the serial disk drive and the first and second idle regenerators, wherein the third idle regenerator is capable of communicating with the serial disk

Art Unit: 2182

drive and the first and second idle regenerators (forty pin SCA 2 receptacle 3 of fig. 2 and col. 5 lines 47-54);

synchronization logic capable of synchronizing data transfers between one of the first idle regenerator and the second regenerator, and the third idle regenerator, wherein the synchronization logic is connected to the first, the second and the third idle regenerators (col. 5 lines 39-41, 62-65); and

Although Samela teaches substantial features (discussed above), he fails to explicitly teach an auto detector is capable of controlling data transfers. Ooi; however, teaches the auto detector is capable of detecting access type of an access to one of ports interfacing to the devices. It would have been obvious to a person of ordinary skill of the art to have the auto detector in order to provide detecting, mapping and selecting one of ports interfacing to devices.

As to claim 23, Samela teaches an apparatus for dual porting a single connector attachment for utilization in fibre channel based communication (40 pin SCA2 and two fibre channel cable DB9 receptacles 48 of figs 2-4), comprising:

a first idle regenerator connected to a first serial master device, the first serial idle regenerator being capable of receiving and transmitting signals to the first serial master device including an idle character stream (DB9 receptacle 48 of fig. 2 and col. 5 lines 27-36);

a second idle regenerator connected to a second serial master device, the second idle regenerator being capable of receiving and transmitting signals to the second serial master device including an idle character stream (DB9 receptacle of fig. 2 and col. 5 lines 27-36);

Art Unit: 2182

a third idle regenerator connected to the serial disk drive and the first and second idle regenerators, wherein the third idle regenerator is capable of communicating with the serial disk drive and the first and second idle regenerators;

synchronization logic capable of synchronizing data transfers between one of the first idle regenerator and the second regenerator, and the third idle regenerator, wherein the synchronization logic is connected to the first, the second and the third idle regenerators (col. 5 lines 39-41, 62-65); and

Although Samela teaches substantial features (discussed above), he fails to explicitly teach an auto detector is capable of controlling data transfers. Ooi; however, teaches the auto detector is capable of detecting access type of an access to one of ports interfacing to the devices. It would have been obvious to a person of ordinary skill of the art to have the auto detector in order to provide detecting, mapping and selecting one of ports interfacing to devices.

Response to Arguments

7. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Nguyen whose telephone number is 571 272-4153. The examiner can normally be reached on 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571 272-4146. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2182

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mike Nguyen
Patent Examiner
Group Art Unit 2182

05/24/2005


FRITZ FLEMING
PRIMARY EXAMINER
GROUP 2100